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| UNISYS CORPORATION | | | VU, NGOC K | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,072

Applicant(s)

RIESCHL ET AL.

Examiner

Ngoc K. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Wahl (U.S. 5,898,456 A).

Regarding claim 1, Wahl discloses in a video on demand system (see figure 1) for supplying video data in response to a user request (a user from U1...UN requests a movie – see col. 3, lines 45-46; col. 2, lines 31-34 and figure 1), the improvement comprising:

a plurality of video servers each capable of supplying video data to said user (for example, central superordinate server, local subordinate server 1...N – see figure 1; col. 2, lines 43-54); and

a multimedia application server (e.g. local server SL1) responsively coupled to said plurality of video servers which receives said request from said user and directs a particular one of said plurality of video servers to supply said video data to said user in response to said user request (for instance, the control facility CL1 at local server SL1 receives a request from a respective user and causes the transmission requested movie from the memory SPL1 to the requesting user. If the local server SL1 is unable to provide the requested movie, the control facility CL1 passes the request from the respective user U1...UN on to the central server SM or one of the other neighboring local servers SL2...SLN – see col. 4, lines 2-8 and 16-20).

Regarding claim 6, Wahl discloses an apparatus (see figure 1) comprising:

a video program requested generated by a user (a user from U1...UN requests a movie – see col. 3, lines 45-46);

a plurality of video servers each capable of streaming said video program to said user (for example, central superordinate server, local subordinate server 1...N – see figure 1; col. 2, lines 43-54); and

a multimedia application server (e.g. local server SL1) which receives said video program request and directs one of the said plurality of video servers to streaming said video program to said user (for instance, the control facility CL1 at local server SL1 receives a request from a respective user and causes the transmission requested movie from the memory SPL1 to the requesting user. If the local server SL1 is unable to provide the requested movie, the control facility CL1 passes the request from the respective user U1...UN on to the central server SM or one of the other neighboring local servers SL2...SLN – see col. 4, lines 2-8 and 16-20).

Regarding claim 11, Wahl discloses a video on demand system (see figure 1; col. 2, lines 31-34) comprising:

means for receiving a user request for a video program (receiving a user request for a movie – see col. 3, lines 45-46);

plurality of means for streaming said video program (for example, central superordinate server, local subordinate server 1...N – see figure 1; col. 2, lines 43-54); and

means responsively coupled to said receiving means and said plurality of streaming means for directing one of said plurality of streaming means to stream said video program to said user in response to said request (for instance, the control facility CL1 at local server SL1 receives a request from a respective user and causes the transmission requested movie from the memory SPL1 to the requesting user. If the local server SL1 is unable to provide the requested movie, the control facility CL1 passes the request from the respective user U1...UN

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on to the central server SM or one of the other neighboring local servers SL2...SLN – see col. 4, lines 2-8 and 16-20).

Regarding claim **16**, Wahl discloses a method of selecting one of a plurality of video servers for streaming a video program to a user comprising:

receiving a message from said user requesting said video program (receiving a user request for a movie – see col. 3, lines 45-46); and

selecting one of a plurality of video servers to stream said video program to said user (for instance, the control facility CL1 at local server SL1 receives a request from a respective user and causes the transmission requested movie from the memory SPL1 to the requesting user. If the local server SL1 is unable to provide the requested movie, the control facility CL1 passes the request from the respective user U1...UN on to a central server SM or one of the other neighboring local servers SL2...SLN – see col. 4, lines 2-8 and 16-20).

Regarding claims **2, 7, 12, and 17**, Wahl discloses selecting one of the servers SL1...SLN or SM based upon the that particular server having the requested movie (col. 4, lines 2-8 and 16-20).

Regarding claims **3 and 8**, Wahl discloses one of the servers SL1...SLN or SM based upon that particular server is not in use. For example, the local server SL1 is unable to provide a movie, the requests for this movie is passed on to the central server SM, which complies with them (see col. 3, lines 58-64).

Regarding claims **4, 9, 13, and 18**, Wahl discloses one of the servers SL1...SLN or SM based upon the that particular server having free storage. For example, the local server SL1 is unable to provide a movie if the number of copies of one of the frequently requested movies A1...A10 is insufficient in the memory of the local server SL1 to comply with the requests for this movie. The requests for this movie is passed on to the central server SM, which complies with

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them. That is the central server SM having sufficient free storage to store the movie (see col. 3, lines 58-64).

Regarding claims **5, 10, 14, and 19**, Wahl discloses replacing a previous movie from one of the servers with the requested movie. For example, movie A10 was deleted from the memory SPL1 while the movie B2 was copied from the central server SM to the local server SL1 (see col. 6, lines 33-36).

Regarding claim **15**, Wahl discloses that the memory SPL1 of the server SL1 has sufficient capacity for streaming movie B2 (see col. 6, lines 27-33).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wahl (US 5,898,456 A).

Regarding claim **20**, Wahl discloses that movie A10 was deleted from the memory SPL1 while the movie B2 was copied from the central server SM to the local server SL1. However, it is also possible to leave the movie A10 in the memory SPL1, if the capacity of the memory SPL1 is large enough (see col. 6, lines 33-38). Wahl does not explicitly disclose inhibiting unloading movie A10 in the memory if the performance utilization of the movie A10 is greater than the performance utilization of movie B2. It is noted that it is obvious to keep movie A10 in the memory if this movie is more frequently requested by users than movie B2 in order to reduce time re-loading this movie from the central server SM to local server SL1. Therefore, it would

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have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Wahl by keeping the previously loaded movie if the performance utilization of the previously loaded movie is greater than the performance utilization of the requested movie in order to reduce time re-loading the previously loaded movie from the central server SM to local server SL1.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shachnai et al. (US 5,544,313 A) discloses a video on demand computer system including a plurality of storage media each storing a plurality of videos.

Chen et al. (US 5,559,764 A) discloses a method of distributing a set of data among a plurality of disks, which provides for load balancing in the event of a disk failure.

Dan et al. (US 5,809,239 A) discloses a video server providing with buffer manager which balancing the loads on the various movie storage elements of a video server by preferentially buffering streams on highly loaded storage elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ngoc K. Vu
Examiner
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June 7, 2004